

**SPECIAL MEETING**

City Hall  
80 Broad Street  
May 30, 2017  
4:30 p.m.

**COMMITTEE ON WAYS AND MEANS**

1. Invocation – Councilmember Lewis
2. A Resolution providing for an election for the determination of the question of whether the City of Charleston shall be empowered to issue and sell General Obligation Bonds of the City of Charleston in the amount not exceeding \$20,000,000 and for the purposes of providing affordable housing as set forth herein.
3. Public Service: Approval of a base contract with Weston & Sampson engineers to perform a detailed analysis and report for storm drainage conditions, flood reduction, and suggested improvements in the Church Creek Drainage Basin. The contract is not to exceed \$300,000.

In accordance with the Americans with Disabilities Act, people who need alternative formats, ASL (American Sign Language) Interpretation or other accommodation please contact Janet Schumacher at (843) 577-1389 or email to [schumacherj@charleston-sc.gov](mailto:schumacherj@charleston-sc.gov) three business days prior to the meeting.



## A RESOLUTION

PROVIDING FOR AN ELECTION FOR THE DETERMINATION OF THE QUESTION OF WHETHER THE CITY OF CHARLESTON SHALL BE EMPOWERED TO ISSUE AND SELL GENERAL OBLIGATION BONDS OF THE CITY OF CHARLESTON IN THE AMOUNT NOT EXCEEDING \$20,000,000 AND FOR THE PURPOSES OF PROVIDING AFFORDABLE HOUSING AS SET FORTH HEREIN.

As an incident to the adoption of this Resolution, the City Council (Council) of the City of Charleston (City) makes the following findings of fact:

1. The General Assembly of the State of South Carolina, in adopting the "South Carolina State Housing, Finance, and Development Authority of 1977" (the 1977 Act) has found:

§31-13-180

- (a) There exists within the State a serious shortage of sanitary and safe residential housing at prices or rentals which persons and families of low income and persons and families of moderate to low income can afford; that this shortage has contributed to and will contribute to the creation and persistence of substandard living conditions and is inimical to the health, welfare and residents of the State.
- (b) That private enterprise and investment have not been able to produce, without governmental assistance, the needed construction of sanitary, decent and safe residential housing at prices or rentals which persons and families of low income and persons and families of moderate to low income can afford and to thus achieve the urgently needed rehabilitation of much of the present low and moderate income housing supply.

2. The South Carolina Supreme Court in Bauer v. South Carolina State Housing Authority, 217 S.C. 219, 246 SE2d 869 (1978) held:

It is manifestly clear that providing safe and sanitary housing for those persons who could not otherwise obtain such housing is a valid public purpose.

3. The South Carolina Supreme Court in Nichols v. South Carolina Research Authority, 290 S.C. 415, 351 SE2d 155 (1986) similarly held:

...industrial development is a valid public purpose..... Accordingly, acts of the General Assembly or its political subdivisions which expend public funds for industrial development area constitutional, PROVIDED they satisfy the four-point standard formulated in Byrd and adopted here.

The Nichols opinion restates, and specifically adopts, the test formulated in Byrd v. County of Florence, 281 S.C. 402, 315 SE2d 804 (1984) as the "standard by which a particular statute for financing industrial development should be tested for constitutionality:

The Court should *first* determine the ultimate goal or benefit to the public intended by the project. *Second*, the Court should analyze whether public or private parties will be the primary beneficiaries. *Third*, the speculative nature of the project must be considered. *Fourth*, the Court must analyze and balance the probability that the public interest will be ultimately served and to what degree. [Emphasis supplied.]

4. Council has determined that the findings made by the General Assembly, quoted above, with respect to South Carolina, manifest themselves in the City as well.

5. Council accepts the conclusion of the South Carolina Supreme Court that "providing safe and sanitary housing for these persons who could not otherwise obtain such housing is a valid public purpose."

6. Council has also determined that the Byrd test adopted by the South Carolina Supreme Court for establishing the constitutionality of acts of the State's political subdivisions which expend funds for the public purpose of industrial development is equally applicable for the purpose of "safe and sanitary housing for those persons who could not otherwise obtain such housing."

7. Council has further determined that this resolution and the ballot question provided for herein satisfies the four-point standard formulated in Byrd.

8. The Municipal Bond Act adopted by the General Assembly and codified as Sections 5-21-210 to 5-21-500, Code of Laws of South Carolina, 1976, authorizes Council to "issue general obligation bonds of such municipality for any corporate purpose...."

9. The provisions of Section 14 of Article X of the Constitution of the State of South Carolina, and Section 11-27-40, Code of Laws of South Carolina, 1976, as amended and the decision of the Supreme Court of South Carolina in the case of Hanna v. City of Florence, 273 S.C. 670, 258 SE2d

500 (1979), permit the question of the issuance of general obligations bonds of the municipality to be submitted to the qualified electors of the municipality.

10. Council has determined that the question of the issuance of general obligation bonds for the acquisition, construction and equipping of safe and affordable rental housing for persons and families of low to moderate income should be presented to the electorate.

11. Council has further determined that the principal amount of such bonds should be in an amount not to exceed \$20,000,000 and should be issued pursuant to the provisions of Section 14(6) of Article X of the Constitution of South Carolina, which Section requires a favorable vote of a majority of the qualified electors of the City voting in referendum authorized by law.

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHARLESTON, SOUTH CAROLINA, IN COUNCIL ASSEMBLED:

SECTION 1.

That the Municipal Election Commission of the City shall conduct in conjunction with the general election to be held in the City on Tuesday, November 7, 2017, on the question of issuing not exceeding \$20,000,000 of General Obligation Bonds for the purposes of defraying the cost of acquiring, constructing and equipping safe and affordable housing for persons and families of low to moderate income.

SECTION 2.

Pursuant to the requirements of Section 7-13-35, Code of Laws of South Carolina, 1976, as amended, and pursuant to the requirements of Section 5-21-290, Code of Laws of South Carolina, 1976, the Municipal Election Commission of the City of Charleston shall cause to be published, at the times required by State law, notices of this election in *The Post & Courier*, a daily newspaper of general circulation in the City of Charleston published in Charleston, South Carolina. The publications of said Notice shall appear on September 8 and September 22, 2017; and that the third publication of said notice shall appear in said newspaper on October 23, 2017. Notice of this election shall also be published in *The Chronicle*.

SECTION 3.

That the polling places for said Election shall be the same as those utilized in the general election. The polls shall be opened at 7:00 o'clock in the forenoon and kept continuously open until 7:00 o'clock in the afternoon on the day of said Election, whereupon they shall be closed.

SECTION 4.

That the Municipal Election Commission of the City shall cause to be prepared the form of ballot to be used in said Election and the instruction to voters appearing thereon, both of which shall be substantially as follows:

In order to assist with the acquisition, construction and equipping of safe and affordable housing for persons and families of low to moderate income, shall the City of Charleston be empowered to issue not exceeding \$20,000,000 of General Obligation Bonds?

YES ☐

NO ☐

INSTRUCTIONS -- Those voting in favor of the issuance of bonds shall check the box marked "YES" and those voting against the issuance of bonds shall check the box marked "NO".

SECTION 5.

That the Municipal Election Commission of the City be given notice of the passage of this Resolution and do all things necessary to conduct the holding of the election in accordance with the laws of the State of South Carolina and be requested and directed:

- (a) to join in the action of City Council in providing for the giving of Notice of Election;
- (b) to name the Managers of Election;
- (c) to provide polling places for the Election;
- (d) to approve the form of ballot set forth in this Resolution; and
- (e) to conduct said Election, receive the returns thereof, and report the same to City Council.

DONE IN MEETING ASSEMBLED THIS \_\_\_\_ day of \_\_\_\_\_, 2017.

CITY OF CHARLESTON, SOUTH CAROLINA

By: \_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
Clerk

STATE OF SOUTH CAROLINA

COUNTY OF CHARLESTON

I, the undersigned, City Clerk of the City of Charleston, South Carolina, DO HEREBY CERTIFY:

That the foregoing is a true, correct and verbatim copy of a Resolution adopted by the City Council of the City of Charleston on \_\_\_\_\_, 2017, at which a majority/all members were present. At said meeting, a quorum of City Council was present at all times during the proceedings pursuant to which the aforesaid Resolution was adopted, the original of which is duly entered in the record of minutes of the aforesaid meetings of said City Council in my custody as said City Clerk.

IN WITNESS WHEREOF, I have hereunto set my Hand this \_\_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
City Clerk, City of Charleston, South Carolina

# COMMITTEE / COUNCIL AGENDA

3

TO: John J. Tecklenburg, Mayor  
FROM: Laura S. Cabiness, PE DEPT. Public Service  
SUBJECT: CHURCH CREEK 2017 FLOOD REDUCTION STUDY  
REQUEST: Approval of base contract with Weston & Sampson engineers to perform a detailed analysis and report for storm drainage conditions, flood reduction, and suggested improvements in the Church Creek Drainage Basin. Contract is Not-To-Exceed.

**COORDINATION:** This request has been coordinated with: (attach all recommendations/reviews)

	Yes	N/A	Signature of Individual Contacted	Attachment
Corporate Counsel	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Cap. Proj. Cmte. Chair	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Dir. Dept. of Public Serv.	<input type="checkbox"/>	<input type="checkbox"/>	<i>Thomas F. B. Smith</i>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

**FUNDING:** Was funding previously approved? Yes ☐ No ☒ N/A ☐

If yes, provide the following: Dept./Div.: 050342  
~~050360~~ Account #: 58238

Balance in Account \$300,000.00 Amount needed for this item \$300,000.00

**Does this document need to be recorded at the RMC Office?** Yes ☐ No ☐

**NEED:** Identify any critical time constraint(s).

CFO's Signature: *Mark R. Dwyer*

**FISCAL IMPACT:**

Mayor's Signature: *John J. Tecklenburg*  
John J. Tecklenburg, Mayor

**ORIGINATING OFFICE PLEASE NOTE: A FULLY STAFFED/APPROVED (except Mayor's Signature) PACKAGE IS DUE IN THE CLERK OF COUNCIL'S OFFICE NO LATER THAN 10:00AM THE DAY OF THE CLERK'S AGENDA MEETING.**



This document is based on the standard document prepared by the **ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE** but has been **MODIFIED** to address particular aspects of the project and the contracting requirements of the **City of Charleston**. Consultation with an attorney is encouraged.

AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR  
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of \_\_\_\_\_, \_\_\_\_\_ (“Effective Date”) between  
the City of Charleston (“OWNER”) and Weston & Sampson Engineers Inc (“ENGINEER”).

OWNER intends to retain the Engineer to provide a detailed analysis and report for storm drainage conditions, flood reduction, and suggested improvements in the Church Creek Drainage Basin. Preparation of construction documents with plans and specifications, permitting and construction administration services may be the subject of subsequent Agreements and/or modifications. . The said services are more fully defined in the Attachment A Scope of Work. (“Project”).

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows:

## ARTICLE 1 - SERVICES OF ENGINEER

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### 1.01 Scope

A. ENGINEER shall provide the Basic and Additional Services set forth herein and in Exhibit A.

B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Basic Services as set forth in Exhibit A.

C. If authorized by OWNER, ENGINEER shall furnish Resident Project Representative(s) with duties, responsibilities and limitations of authority as set forth in Exhibit D.

## ARTICLE 2 - OWNER'S RESPONSIBILITIES

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### 2.01 General

A. OWNER shall have the responsibilities set forth herein and in Exhibit B.

## ARTICLE 3 - TIMES FOR RENDERING SERVICES

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### 3.01 General

A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.

B. If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided, and if such periods of time or dates are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.

C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

### 3.02 Suspension

A. If OWNER fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.

B. If ENGINEER's services are delayed or suspended in whole or in part by OWNER, for more than 90 days through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other things, such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

## ARTICLE 4 - PAYMENTS TO ENGINEER

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### 4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

A. *For Basic Services.* OWNER shall pay ENGINEER for Basic Services performed or furnished under Exhibit A, Part 1, as set forth in Exhibit C.

B. *For Additional Services.* OWNER shall pay ENGINEER for Additional Services performed or furnished under Exhibit A, Part 2, as set forth in Exhibit C.

C. *For Reimbursable Expenses.* In addition to payments provided for in paragraphs 4.01.A and 4.01.B, OWNER shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit C.

### 4.02 Other Provisions Concerning Payments

A. *Preparation of Invoices.* Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER, unless otherwise agreed. The amount billed in each invoice will be calculated as set forth in Exhibit C.

B. *Payment of Invoices.* Invoices are due and payable within 30 days of receipt. If OWNER fails to make any payment due ENGINEER for services and expenses within 30 days after receipt of ENGINEER's invoice therefor, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement

until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.

C. *Disputed Invoices.* In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

D. *Payments Upon Termination.*

1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice OWNER and will be paid in accordance with Exhibit C for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.

E. *Records of ENGINEER's Costs.* Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. To the extent necessary to verify ENGINEER's charges and upon OWNER's timely request, copies of such records will be made available to OWNER at no additional cost.

F. *Legislative Actions.* In the event of legislative actions after the Effective Date of the Agreement by any level of government that impose taxes, fees, or costs on ENGINEER's services or other costs in connection with this Project or compensation therefor, such new taxes, fees, or costs shall be invoiced to and paid by OWNER as a Reimbursable Expense to which a Factor of 1.0 shall be applied. Should such taxes, fees, or costs be imposed, they shall be in addition to ENGINEER's estimated total compensation.

## ARTICLE 5 - OPINIONS OF COST

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### 5.01 Opinions of Probable Construction Cost

A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If OWNER

wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator as provided in Exhibit B.

### 5.02 Opinions of Total Project Costs

A. If the lowest bona fide proposal or bid exceeds the final opinion of probable construction cost by more than 10%, the ENGINEER shall without additional charge to the OWNER, modify the contract documents as necessary to bring the project within the final opinion of probable construction cost. The ENGINEER's redesign responsibility shall also include the advertising and reprinting costs associated with the redesign.

## ARTICLE 6 - GENERAL CONSIDERATIONS

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### 6.01 Standards of Performance

A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and OWNER shall not be responsible for discovering deficiencies therein. ENGINEER shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in OWNER-furnished information.

C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

D. ENGINEER and OWNER shall comply with applicable Laws or Regulations and OWNER-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for

modifications to OWNER's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.

E. OWNER shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by OWNER to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.

F. OWNER shall make decisions and carry out its other responsibilities in a timely manner and shall bear all costs incident thereto so as not to delay the services of ENGINEER.

G. Prior to the commencement of the Construction Phase, OWNER shall notify ENGINEER of any variations from the language indicated in Exhibit E, "Notice of Acceptability of Work," or of any other notice or certification that ENGINEER will be requested to provide to OWNER or third parties in connection with the Project. OWNER and ENGINEER shall reach agreement on the terms of any such requested notice or certification, and OWNER shall authorize such Additional Services as are necessary to enable ENGINEER to provide the notices or certifications requested.

H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. OWNER agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.

L. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (Document No. 1910-8, 1996 Edition).

#### **6.02 Authorized Project Representatives**

A. Contemporaneous with the execution of this Agreement, ENGINEER and OWNER shall designate specific individuals to act as ENGINEER's and OWNER's representatives with respect to the services to be performed

or furnished by ENGINEER and responsibilities of OWNER under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

#### **6.03 Design without Construction Phase Services**

A. Should OWNER provide Construction Phase services with either OWNER's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in Exhibit A.

B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by OWNER, then OWNER assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

#### **6.04 Use of Documents**

A. All Documents are instruments of service in respect to the Project, and upon payment therefor, OWNER shall retain an ownership and property interest therein whether or not the Project is completed. Any further use of the documents referenced herein is at the OWNER's sole risk.

B. Copies of OWNER-furnished data that may be relied upon by ENGINEER are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER pursuant to Exhibit B. Files in electronic media format of text, data, graphics, or of other types that are furnished by OWNER to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

C. Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party

receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by OWNER.

E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.

G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

#### **6.05 Insurance**

A. ENGINEER shall procure and maintain insurance as set forth in Exhibit G, "Insurance." ENGINEER shall cause Engineering Consultants to procure and maintain like insurance as set forth in Exhibit G, Insurance.

C. OWNER and ENGINEER shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of ENGINEER's services and at renewals thereafter during the life of the Agreement.

F. At any time, OWNER may request that ENGINEER, at OWNER's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by OWNER, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by OWNER, and Exhibit G will be supplemented to incorporate these requirements.

#### **6.06 Termination**

A. The obligation to provide further services under this Agreement may be terminated:

##### *1. For cause,*

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

##### *b. By ENGINEER:*

1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by OWNER to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or

2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.

3) ENGINEER shall have no liability to OWNER on account of such termination.

c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

##### *2. For convenience,*

a. By OWNER effective upon the receipt of notice by ENGINEER.

B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

#### **6.07 Controlling Law**

A. This Agreement is to be governed by the laws of the State of South Carolina.

#### **6.08 Successors, Assigns, and Beneficiaries**

A. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

B. Neither OWNER nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by OWNER or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party.

#### **6.09 Dispute Resolution**

A. OWNER and ENGINEER agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice of a dispute prior to exercising their rights under this Agreement or under law.

#### **6.10 Hazardous Environmental Condition**

A. OWNER represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.

B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.

C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials.

D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

E. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER's activities under this Agreement.

F. If ENGINEER's services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER's terminating this Agreement for cause on 30 days' notice.

#### **6.11 Allocation of Risks**

##### **A. Indemnification**

1. To the fullest extent permitted by law, ENGINEER shall indemnify and hold harmless OWNER, OWNER's officers, directors, partners, and employees from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) to the extent caused by the negligent acts or omissions of ENGINEER or

ENGINEER's officers, directors, partners, employees, and ENGINEER's Consultants in the performance and furnishing of ENGINEER's services under this Agreement.

2. OWNER shall be responsible for its acts of negligence in accordance with and to the extent provided in the S.C. Tort Claims Act, as amended.

#### 6.12 Notices

A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

#### 6.13 Survival

A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

#### 6.14 Severability

A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

#### 6.15 Waiver

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

#### 6.16 Headings

A. The headings used in this Agreement are for general reference only and do not have special significance.

## ARTICLE 7 - DEFINITIONS

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### 7.01 Defined Terms

A. Wherever used in this Agreement (including the Exhibits hereto) and printed with initial or all capital letters, the terms listed below have the meanings indicated, which are applicable to both the singular and plural thereof:

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.

2. *Additional Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 2 of this Agreement.

3. *Agreement*--This "Standard Form of Agreement between OWNER and ENGINEER for Professional Services," including those Exhibits listed in Article 8 hereof.

4. *Application for Payment*--The form acceptable to ENGINEER which is to be used by ENGINEER in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

5. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

6. *Basic Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 1, of this Agreement.

7. *Bid*--The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

8. *Bidding Documents*--The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.

9. *Change Order*--A document recommended by ENGINEER, which is signed by ENGINEER and OWNER to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or

the Contract Times, issued on or after the Effective Date of the Construction Agreement.

10. *Contractor*--An individual or entity with whom OWNER enters into a Construction Agreement.

11. *Documents*--Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by ENGINEER to OWNER pursuant to this Agreement.

12. *Effective Date of the Agreement*--The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

13. *ENGINEER's Consultants*--Individuals or entities having a contract with ENGINEER to furnish services with respect to this Project as ENGINEER's independent professional associates, consultants, subcontractors, or vendors. The term ENGINEER includes ENGINEER's Consultants.

14. *Field Order*--A written order issued by ENGINEER which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

15. *General Conditions*--That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by ENGINEER with respect to the Project.

16. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Materials in such quantities or circumstances that present a substantial danger to persons or property exposed thereto in connection with the Work.

17. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

18. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

19. *PCB's*--Polychlorinated biphenyls.

20. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

21. *Radioactive Materials*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

22. *Record Drawings*--The Drawings as issued for construction on which the ENGINEER, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which ENGINEER considers significant.

23. *Reimbursable Expenses*--The expenses incurred directly by ENGINEER in connection with the performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.

24. *Resident Project Representative*--The authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are as set forth in Exhibit D.

25. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

26. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor.

27. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, rights-of-way and



easements for access thereto, and such other lands which are designated by OWNER.

28. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

29. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of OWNER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

30. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements the General Conditions.

31. *Total Project Costs*--The sum of the Construction Cost, allowances for contingencies, the total costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement.

32. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents with respect to this Project. Work includes and is the result of performing or furnishing labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and all equipment into such construction, all as required by the Contract Documents.

33. *Work Change Directive*--A written directive to ENGINEER issued on or after the Effective Date of the Agreement and signed by OWNER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the

Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

34. *Written Amendment*--A written amendment of the Contract Documents signed by OWNER and ENGINEER on or after the Effective Date of the Agreement.

## **ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS**

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### **8.01 Exhibits Included**

A. Exhibit A, "ENGINEER's Services," consisting of 3 pages.

B. Exhibit B, "OWNER's Responsibilities," consisting of 2 pages.

C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," and "Appendices 1 and 2" consisting of 5 pages.

D. Exhibit D is intentionally omitted.

E. Exhibit E is intentionally omitted.

F. Exhibit F is intentionally omitted.

G. Exhibit G, "Insurance," consisting of 2 pages.

H. Attachment A, "Scope of Work" identified on pages 2 through 5 of the Weston & Sampson Engineers, Inc. letter dated May 04, 2017.

### **8.02 Total Agreement**

A. This Agreement (consisting of pages 1 to 13 inclusive, together with the Exhibits identified above) and Attachment A, the Scope of Work constitutes the entire agreement between OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

OWNER:

City of Charleston

By: John J. Tecklenburg

Title: Mayor

Date \_\_\_\_\_ Signed: \_\_\_\_\_

Address for giving notices:

City of Charleston Department of Public Service

2 George Street

Charleston, South Carolina 29401

Designated Representative (paragraph 6.02.A):

Laura S. Cabiness, P.E.

Title: Director of Public Service

Phone Number: (843) 724-3754

Facsimile Number: (843) 973-7261

E-Mail Address: cabinessl@charleston-sc.gov

ENGINEER:

Weston & Sampson Engineers Inc.

By: Robert L. Horner, PE

Title: Vice President / Principal

5-19-17  
Date Signed: 

Address for giving notices:

Weston & Sampson Engineers Inc.

672 Marina Drive, Suite 204

Charleston, South Carolina 29492

Designated Representative (paragraph 6.02.A):

Robert L. Horner, PE

Title: Vice President / Principal

Phone Number: 843-881-9804 (O) 843-452-9076 (C)

Facsimile Number: \_\_\_\_\_

E-Mail Address: HornerR@wseinc.com

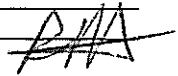
SUGGESTED FORMAT  
(for use with 1910-1, 1996 Edition)

This is **EXHIBIT A**, consisting of 3 pages, referred to in and  
part of the **Agreement between OWNER and ENGINEER**  
for Professional Services dated \_\_\_\_\_,

Initial:

OWNER \_\_\_\_\_

ENGINEER \_\_\_\_\_



**ENGINEER's Services**

Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. ENGINEER shall provide Basic and Additional Services as set forth below and in Attachment A, the Scope of Work.

**PART 1 -- BASIC SERVICES**

**A1.01 Study and Report Phase**

**A. ENGINEER shall:**

1. Consult with OWNER to define and clarify OWNER's requirements for the Project and available data.
2. Advise OWNER as to the necessity of OWNER's providing data or services of the types described in Exhibit B which are not part of ENGINEER's Basic Services, and assist OWNER in obtaining such data and services.
3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by ENGINEER, including but not limited to mitigating measures identified in the environmental assessment.
4. Identify and evaluate alternate solutions available to OWNER and, after consultation with OWNER, recommend to OWNER those solutions which in ENGINEER's judgment meet OWNER's requirements for the Project.
5. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to OWNER which ENGINEER recommends. This Report will be accompanied by the ENGINEER's opinion of Total Project Costs for each solution which is so recommended for the Project with each component separately itemized, including the following, which will be separately itemized: opinion of probable Construction Cost, allowances for contingencies and for the estimated total costs of design, professional, and related services provided by ENGINEER and, on the basis of information furnished by OWNER, allowances for other items and services included within the definition of Total Project Costs.
6. Perform or provide the following additional Study and Report Phase tasks or deliverables as stated in Attachment A
7. Furnish 6 review copies of the Report to OWNER within 180 days of authorization to begin services and review it with OWNER.
8. Revise the Report in response to OWNER's and other parties' comments, as appropriate, and furnish 6 final copies of the revised Report to the OWNER within 15 days after completion of reviewing it with OWNER.

B. ENGINEER's services under the Study and Report Phase will be considered complete on the date when the final copies of the revised Report have been delivered to OWNER.

## **PART 2 -- ADDITIONAL SERVICES**

### **A2.01 *Additional Services Requiring OWNER's Authorization in Advance***

A. If authorized in writing by OWNER, ENGINEER shall furnish or obtain from others Additional Services of the types listed below. These services will be paid for by OWNER as indicated in Article 4 of the Agreement.

1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project unless otherwise provided in Basic Services.

2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by OWNER.

3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by ENGINEER or its design requirements including, but not limited to, changes in size, complexity, OWNER's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond ENGINEER's control.

4. Services resulting from OWNER's request to evaluate additional Study and Report Phase alternative solutions beyond those previously identified.

5. Services required as a result of OWNER's providing incomplete or incorrect Project information with respect to Exhibit B.

6. Providing additional renderings or models for OWNER's use that are not covered by the Scope of Services.

7. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting OWNER in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by OWNER.

8. Furnishing services of ENGINEER's Consultants for other than Basic Services.

9. Services attributable to more prime construction contracts than specified in paragraph A1.03.C.

10. Services during out-of-town travel required of ENGINEER other than for visits to the Site or OWNER's office.

11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by OWNER; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.

12. Providing assistance in resolving any Hazardous Environmental Condition in compliance with current Laws and Regulations.

13. Preparing to serve or serving as a consultant or witness for OWNER in any litigation, arbitration or other dispute resolution process related to the Project unless the service is required as a result of an error or omission or breach of this Agreement by the ENGINEER or its officers, directors, partners, employees, or consultants.

14. Providing more extensive services required to enable ENGINEER to issue notices or certifications requested by OWNER under paragraph 6.01.G of the Agreement.

15. Other services performed or furnished by ENGINEER not otherwise provided for in this Agreement.

*A2.02 Required Additional Services*

A. ENGINEER shall perform or furnish, without requesting or receiving specific advance authorization from OWNER, the Additional Services of the types listed below. ENGINEER shall advise OWNER in writing promptly after starting any such Additional Services.

1. Services in connection with Work Change Directives and Change Orders to reflect changes requested by OWNER so as to make the compensation commensurate with the extent of the Additional Services rendered

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This is **EXHIBIT B**, consisting of 2 pages, referred to in and  
part of the **Agreement between OWNER and ENGINEER**  
for **Professional Services** dated \_\_\_\_\_,

Initial:

OWNER \_\_\_\_\_

ENGINEER \_\_\_\_\_



**OWNER's Responsibilities**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:

A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications; and furnish copies of OWNER's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.

B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.

C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services. Such additional information or data would generally include the following:

1. Property descriptions.
2. Zoning, deed, and other land use restrictions.
3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.
6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.

D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services.

E. Authorize ENGINEER to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as requested by the Owner.

F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.

G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as OWNER deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.

J. Furnish to ENGINEER data as to OWNER's anticipated costs for services to be provided by others for OWNER so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.

K. If OWNER designates a construction manager or an individual or entity other than, or in addition to, ENGINEER to represent OWNER at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of ENGINEER.

L. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.

SUGGESTED FORMAT  
(for use with 1910-1, 1996 Edition)

This is **EXHIBIT C**, consisting of 3 pages, referred to in and  
part of the **Agreement between OWNER and ENGINEER**  
for Professional Services dated \_\_\_\_\_,

Initial:  
OWNER \_\_\_\_\_  
ENGINEER           PMA          

**Payments to ENGINEER for Services and Reimbursable Expenses**

Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 4 -- PAYMENTS TO THE ENGINEER**

**C4.01 *For Basic Services Having A Determined Scope --Lump Sum Method of Payment***

A. OWNER shall pay ENGINEER for Basic Services set forth in Exhibit A, except for services of ENGINEER's Resident Project Representative and Post-Construction Phase services, if any, as follows:

1. A Not-To-Exceed amount of \$300,00.00 as per Attachment A.
2. ENGINEER may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total Not-To-Exceed amount unless approved in writing by the OWNER.
3. The Not-To-Exceed amount includes compensation for ENGINEER's services and services of ENGINEER's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
4. The portion of the Not-To-Exceed amount billed for ENGINEER's services will be based upon ENGINEER's estimate of the proportion of the total services actually completed during the billing period to the Lump Sum.
5. The Not-To-Exceed amount is conditioned on Contract Times to complete the Work not exceeding 2 months. Should the Contract Times to complete the Work be extended beyond this period, the total compensation to ENGINEER shall be appropriately adjusted.
6. If more prime contracts are awarded for Work designed or specified by ENGINEER for this Project than identified in Exhibit A, the ENGINEER shall be compensated an additional amount which shall be negotiated for all Basic Services for each prime contract added.

**C4.02 *For Additional Basic Services Having An Undetermined Scope -- Standard Hourly Rates Method of Payment***

A. If authorized by OWNER in writing, OWNER shall pay ENGINEER for Basic Services having an undetermined scope as follows:

**C4.03 *For Additional Services***

A. OWNER shall pay ENGINEER for Additional Services as follows:



1. *General.* For services of ENGINEER's employees engaged directly on the Project pursuant to paragraph A2.01 or A2.02 of Exhibit A, except for services as a consultant or witness under paragraph A2.01.A.20, an amount equal to the cumulative hours charged to the Project by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus Reimbursable Expenses and ENGINEER's Consultant's charges, if any.

2. *Serving as a Witness.* Compensation for services by ENGINEER or its officers, directors, partners, employees or consultants, as witnesses, giving testimony in any litigation, or other legal or administrative proceedings under paragraph A2.01.A.20, including time spent in preparing to testify in any such litigation, or proceeding will be based on the "Standard Hourly Rates" set forth in Appendix 2 to this Exhibit C unless the service is required as a result of any error or omission or breach of this Agreement by the ENGINEER or its officers, directors, partners, employees or consultants.

#### C4.04 *For Reimbursable Expenses*

A. When not included in compensation for Basic Services under paragraph C4.01, OWNER shall pay ENGINEER for Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C not to exceed \$1,500.00.

B. Reimbursable Expenses include the following categories: out-of-town transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and their assistants; toll telephone calls and telegrams; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by OWNER, overtime work requiring higher than regular rates. In addition, if authorized in advance by OWNER, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.

C. The amounts payable to ENGINEER for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by ENGINEER, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a Factor of 1.0.

D. The Reimbursable Expenses schedule will be adjusted annually, as of 2018 to reflect equitable changes in the compensation Payable to ENGINEER and shall not exceed a 3% adjustment in any given year.

#### C4.05 *Standard Hourly Rates*

A. Standard Hourly Rates are set forth in Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.

B. The standard hourly rates will be adjusted annually, as of 2018 to reflect equitable changes in the compensation payable to the ENGINEER and shall not exceed a 3% adjustment on any given year.

#### C4.06 *For ENGINEER's Consultant's Charges*

A. Whenever compensation to ENGINEER herein is stated to include charges of ENGINEER's Consultants, those charges shall be the amounts billed by ENGINEER's Consultants to ENGINEER times a Factor of 1.0.

#### C4.07 *Factors*

A. The external Reimbursable Expenses and ENGINEER's Consultant's Factors include ENGINEER's overhead and profit associated with ENGINEER's responsibility for the administration of such services and costs.

*C4.08 Other Provisions Concerning Payment*

A. *Progress Payments.* The portion of the amounts billed for ENGINEER's services which are related to the services identified in paragraphs C4.02 and C4.03, will be during the billing period based on the cumulative hours charged to the Project by each class of ENGINEER's employees times the Standard Hourly Rate for each class plus Reimbursable Expenses and ENGINEER's Consultant's charges, if any.

B. *Extended Contract Times.* Should the Contract Times to complete the Work be extended beyond the period identified in paragraph C4.01, payment for ENGINEER's services shall be continued based on the Standard Hourly Rates Method of Payment.

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(for use with No. 1910-1, 1996 Edition)

This is **Appendix 1 to EXHIBIT C**, consisting of 1 page, referred to in and part of the Agreement between **OWNER** and **ENGINEER** for Professional Services dated \_\_\_\_\_, \_\_\_\_\_.

Initial:

OWNER \_\_\_\_\_  
ENGINEER BAA

**Reimbursable Expenses Schedule**

Current agreements for engineering services stipulate that the Reimbursable Expenses are subject to review and adjustment per Exhibit C. Reimbursable expenses for services performed under this Agreement shall be:

Reproducible Copies (Paper 24x36)	\$ .45 / sq/ ft.
Mileage (auto)	\$ .535 /mile
Out-of-Pocket Expenses	at actual cost plus 15%

SUGGESTED FORMAT  
(for use with No. 1910-1, 1996 Edition)

Appendix 2 to **EXHIBIT C**, consisting of 1 pages, referred to  
in and part of the **Agreement between OWNER and**  
**ENGINEER for Professional Services** dated  
\_\_\_\_\_, \_\_\_\_\_.

Initial:  
OWNER \_\_\_\_\_  
ENGINEER           *RMA*          

**Standard Hourly Rates Schedule for Additional Services**

Current agreements for engineering services stipulate that the standard hourly rates are subject to review and adjustment per Exhibit C. Hourly rates for services performed under this Agreement shall be:

Billing Class 9	Principal	\$ <u>200/hour</u>
Billing Class 8	Project Manager	\$ <u>145/hour</u>
Billing Class 7	Project Engineer	\$ <u>130/hour</u>
Billing Class 6	Senior Designer	\$ <u>130/hour</u>
Billing Class 5	Senior Structural Engineer	\$ <u>200/hour</u>
Billing Class 4	Senior Planner	\$ <u>145/hour</u>
Billing Class 3	Engineer II	\$ <u>125/hour</u>
Billing Class 2	Engineer I	\$ <u>115/hour</u>
Billing Class 1	CADD Technician	\$ <u>115/hour</u>
Support Staff	Technical Project Coordinator	\$ <u>80/hour</u>
Support Staff	Clerical	\$ <u>80/hour</u>

SUGGESTED FORMAT  
(for use with No. 1910-1, 1996 Edition)

This is **EXHIBIT G**, consisting of 2 pages, referred to in and  
part of the **Agreement between OWNER and ENGINEER**  
for Professional Services dated \_\_\_\_\_,

Initial:

OWNER \_\_\_\_\_  
ENGINEER BAA

**Insurance**

Paragraph 6.05 of the Agreement is amended and supplemented to include the following agreement of the parties.

**G6.05 Insurance**

A. The limits of liability for the insurance required by paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By ENGINEER:

- |   |                       |
|---|-----------------------|
| a. Workers' Compensation:   | Statutory             |
| b. Employer's Liability --  |                       |
| 1) Each Accident:   | <u>\$500,000.00</u>   |
| 2) Disease, Policy Limit:   | <u>\$500,000.00</u>   |
| 3) Disease, Each Employee:  | <u>\$500,000.00</u>   |
| c. General Liability --   |                       |
| 1) Each Occurrence (Bodily Injury and<br>Property Damage):                        | <u>\$1,000,000.00</u> |
| 2) General Aggregate:   | <u>\$2,000,000.00</u> |
| d. Excess or Umbrella Liability --  |                       |
| 1) Each Occurrence:   | <u>\$4,000,000.00</u> |
| 2) General Aggregate:   | <u>\$4,000,000.00</u> |
| e. Automobile Liability --  |                       |
| 1) Bodily Injury:   |                       |
| a) Each Accident  | <u>\$1,000,000.00</u> |
| 2) Property Damage:   |                       |
| a) Each Accident  | <u>\$1,000,000.00</u> |
| [or]  |                       |
| 1) Combined Single Limit<br>(Bodily Injury and Property Damage):<br>Each Accident | <u>\$1,000,000.00</u> |
| f. Other (specify):   |                       |
| Professional Liability (errors and omissions):                                    | <u>\$2,000,000.00</u> |

B. *Additional Insureds*

1. The following persons or entities are to be listed on ENGINEER's policies of insurance as additional insureds as provided in paragraph 6.05.B:

- a. WESTON & SAMPSON ENGINEERS, INC.  
ENGINEER
- b. DHI GROUP  
ENGINEER'S CONSULTANT
- c. ATLANTIC SOUTH CONSULTING SERVICES  
ENGINEER'S CONSULTANT
- d. City of Charleston  
OWNER



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/19/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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<b>PRODUCER</b> Eastern Insurance Group LLC 233 West Central Street  Natick MA 01760		<b>CONTACT NAME:</b> Construction <b>PHONE (A/C No. Ext):</b> (508) 651-7700 <b>FAX (A/C No.):</b> <b>E-MAIL ADDRESS:</b>	
<b>INSURED</b> Weston & Sampson Engineers, Inc.  Five Centennial Drive Peabody MA 01960		<b>INSURER(S) AFFORDING COVERAGE</b> <b>INSURER A:</b> Great Divide Insurance Co. NAIC # 25224 <b>INSURER B:</b> Starr Indemnity & Liability Co. 38318 <b>INSURER C:</b> Lexington Insurance Co. <b>INSURER D:</b> The Hartford Insurance Co. <b>INSURER E:</b> <b>INSURER F:</b>	

**COVERAGES**

CERTIFICATE NUMBER: MASTER 2017

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability <input type="checkbox"/> coverage per policy form GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		GLP200736514	1/1/2017	1/1/2018	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000		
	A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS <input checked="" type="checkbox"/> COMP./COLL. <input checked="" type="checkbox"/> \$1000 DED.		MAA2007361-14 MA BAP2007360-14 AOS includes FL	1/1/2017 1/1/2017	1/1/2018 1/1/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
		B	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTIONS		1000022452	1/1/2017	1/1/2018	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000
		A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WCA200737014 Coverage applies in MA, CT, FL, GA, NH, NY, RI, SC VT and WI	1/1/2017 1/1/2018	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C		PROFESSIONAL/POLLUTION		031710990	7/3/2016	7/3/2017	Per Claim/Policy Aggregate \$3,000,000	
D	Valuable Papers		08UUNZJ4850	01/01/2017	01/01/2018	Limit \$100,000		

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: Church Creek 2017 Flood Reduction Project

CITY OF CHARLESTON IS INCLUDED AS ADDITIONAL INSURED WITH RESPECT TO GENERAL LIABILITY, AUTO AND UMBRELLA LIABILITY AS REQUIRED BY WRITTEN CONTRACT.

**CERTIFICATE HOLDER****CANCELLATION**

CITY OF CHARLESTON  
DEPARTMENT OF PUBLIC SERVICE  
ATTN: Insurance Compliance  
2 GEORGE STREET  
CHARLESTON, SC 29401

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

John Koegel/PMA

ACORD 25 (2010/05)

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INS025 (201005) 01

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ATTACHMENT A  
SCOPE OF WORK

Weston & Sampson

May 04, 2017

672 Marina Drive, Suite 204, Charleston, SC 29492  
Tel: 843.881.8804

Laura Cabiness, PE  
Director of Public Services  
City of Charleston  
2 George Street  
Charleston, SC 29401

RE: Evaluation of the Church Creek Drainage Basin and Flood Reduction Study

Dear Mrs. Cabiness,

We are pleased to offer the following scope of work and revised cost proposal associated with the referenced project for the City of Charleston. The Scope follows our approach and incorporates comments from our kick-off meeting held on April 10<sup>th</sup>. The cost proposal does not include software costs. We discussed incorporating assistance with the upgrade and implementation of the software change from ICPR 3 to ICPR 4 as a part of our efforts. Language has been added to the scope accordingly. We also revise the monitoring station approach to allow the City to decide on the number of stations for water surface elevation data collection. We have suggested that the City consider collecting data from 6 additional locations to assist initially with model calibration. The monitoring could be extended to assist with the direction of maintenance based on providing alarms when water surface elevations respond to storms in a manner that is not consistent with normal operation. This approach is based on a 6 month minimum data collection term which may be extended at a reduced monthly rate from that provided on the cost proposal.

We appreciate the opportunity to provide a proposal and look forward to working with you and the City staff as the project develops.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

By:



Robert L. Horner, PE, Vice President



## SCOPE OF WORK

### KICKOFF & COMMUNITY OUTREACH

To begin the project we anticipate holding a kickoff meeting between the key members of our team and City Staff to clarify the scope and develop a reasonable project schedule. Public Outreach will be conducted during this phase to solicit input from the basin and to build consensus with constituents. Organization of owner's association leaders will help provide guidance for the development of the structure of a public meeting and workshop plan. We anticipate have outreach meetings with each HOA in the basin. That will include Grand Oaks, Shadowmoss, Hickory Hills, Hickory Farms, Canterbury Woods, Forest Lakes and Village Green. Additional meetings will be held with 12 individual special interest group representatives or constituents who have been impacted or active in the basin in the past. This represents a total of 7 group meetings and 12 individual meetings which would be held at the beginning of the project and then again once the evaluation is complete to present the findings and gain consensus. Group meetings would initially be held to present the plan for the study with mapping and exhibits of the defined study area. There would be a brief presentation to review the goals of the study along with an interactive session to collect information from residents and property owners as well as a question and answer period. Three Team members (engineers) from the W&S Team would provide the presentation and interact with attendees.

This process would be repeated at the conclusion of the evaluation to present the findings and recommendations. One set of exhibits would be developed for each round of the meetings along with a PowerPoint presentation. Coordination and collaboration with the City and County for impacts from adjacent jurisdictions in unincorporated areas would also be initiated during this phase.

### DATA COLLECTION

Our familiarity with the region and the basin will help make this phase very effective. Existing drainage inventory maps will be reviewed and compared to existing conditions. Elevations, conditions and sizes of key structures will be field verified. The inventory and mapping will be compared to components in the existing hydraulic model. We will review in detail with the Team Members, all past studies and recommended improvements that resulted. In addition, there will be a review of current design standards, water quality and MS4 compliance requirements using an approach that is specific to the concerns of the Church Creek Basin. Team members will perform a site visit to key drainage asset components on trunk systems in the basin. This will include reviewing conditions of main trunk system culverts, identifying sediment deposition, outfall inspections and channel conditions. We will use survey data from previous survey data collection efforts.

Additional tasks included:

- Compile/collect map to plan inspections, ID system Components to inspect
- Review model key components
- Develop Rain on Grid Model for natural flow patterns & wetland levels
- Staff workshops (Three 2 hour workshops)
- Reports preparation and status presentation to Staff

## EXISTING CONDITIONS AND PAST STUDY RECOMMENDATIONS ASSESSMENTS

We will identify all improvements that can quickly add capacity to the system. We intend to study all areas baseline conditions for the basin will be reviewed as well as the current hydraulic model. Calibration data will be evaluated to validate assumptions and to verify consistency with recent events where data is available. We anticipate continuing our field investigations to review each key stormwater culvert on the main stormwater system to observe any factors influencing their performance. The land use plan will be reviewed and the build out condition will be established in order to determine future stormwater flows. We will identify external impacts to the model performance such as flooded wetland areas, tidal impacts associated with tailwater conditions and realistic expected volumes of debris that can impact hydraulic performance in the stormwater conveyance system. Planning periods (ie. 2 year, 5 year, 10 year, 15 year, 20 year, buildout) will be determined to assist with capital planning for any recommended improvements common to all planning horizons evaluated as a part of this study. All recommendations from previous studies will be vetted and appropriately incorporated into a build out condition hydraulic model if the recommendation is deemed beneficial. Any additional structural improvements will be evaluated based on current design standards. Recommendations will be made for improvements based upon current conditions as well as for future planning periods as determined by the Project Team.

Additional Tasks Included:

- ID Basin Boundary
- Develop Buildout Land Use Plan
- Identify wetland responses, water surface elevations
- Review current model calibration
- Transition input data into ICPR 4 (Software provided by City with operating license for W&S and DHI to enable model development & model run evaluation)
- Staff workshops (three 2 hour workshops)
- Collaborate with model software provider to resolve operational issues, discuss upgrade
- Develop Model Runs for Various Alternatives with varying storm intensities
- Review past Capital Project Recommendations
- Develop top 10 quick capacity increase measures
- Develop alternatives for conveyance
- Evaluate modifications to development standards
- Develop sensitivity analysis for critical maintenance locations
- Provide report and present to staff

## FINAL STUDY AND RECOMMENDATIONS FOR IMPROVEMENT

Once the Team is able to establish favorable changes to current standards or recommendations not yet implemented, the Team will take the proposed 5, 10, 15, 20 year and buildout plan and stage common improvements based on anticipated development and Stormwater flows taking into account the forecasted changes in tidal impacts and storm frequency, intensity and duration.

A capital improvement plan will be developed to identify any required improvements while providing anticipated total costs on a schedule that will allow appropriate periods for preliminary planning, design, permitting, funding and construction. This will enable improvements to be planned based on resolving current issues as well as the progression of development through the build out condition. Hydraulics will be studied and verified against a calibrated model. The model will be established based on a format that will enable frequent updating using non-proprietary methods. This will enable the City to establish a simple asset management system to track performance, operation and maintenance.

**Additional Tasks Included:**

- Develop CIP for conveyance projects, cost estimates, schedules
- Provide graphics showing project locations
- Update hydraulic model to appropriate version
- Report prep and presentation to staff

## **RESILIENCE / ADAPTIVE MANAGEMENT / OPERATION**

It is likely that on such a widespread system, that some very simple monitoring stations will be recommended that are tied to a SCADA system which will provide real time data collection of storm events and water surface elevations to document the performance of the drainage system. This will enable a much more accurate calibration of the hydraulic model while developing trends in performance that could be used to help direct future construction, improvements and maintenance efforts in an efficient manner. There are many suppliers of such systems now, many of which are relatively simple and economical. An internet or cellular based system would serve this application well. Data can be linked to a GIS System that is part of an overall asset management program. These systems can be simple and very effective for storing and organizing information associated with drainage systems.

Once the baseline improvement recommendations have been determined, the Team will establish a resilience program for the basin. This program will incorporate existing design standards where appropriate as well as new standards where deemed beneficial with respect to stormwater quality and quantity. Climatological factors will be incorporated and innovative approaches will be evaluated in order to mitigate increased flood risk exposure due to storm or tidal event impacts. Our Team will develop an accurate understanding of how all of the drainage features interact with tidal events. In the past, there have been high tide scenarios which inundated some drainage assets. Our evaluation will review these events and our alternative analysis will include innovative approaches to preserve stormwater storage capacity during similar events in the future.

**Additional Tasks Included:**

Develop resilience standards for basin  
Evaluate sea level rise impacts and alternatives for mitigation  
Develop model runs with alternatives to address climate change

Water surface elevation monitors (Based on Costs outlined in Cost Proposal)  
Install temporary water surface elevation monitoring Stations for monthly service including  
Remote, Solar Powered, cellular modem, and SST Panel  
And Central HMI for development of Trends and alarms

# Level of Effort and Cost Table

Weston & Sampson

5/4/2017

## EVALUATION OF THE CHURCH CREEK DRAINAGE BASIN AND FLOOD REDUCTION STUDY

TASK NO.	TASK DESCRIPTION	Billing Costs	
		Total	Cost
A	COMMUNITY OUTREACH		\$46,715
B	DATA COLLECTION		\$121,950
C	EX. CONDITIONS & PAST STUDY RECOMMENDATIONS		\$64,800
D	FINAL STUDY AND RECOMMENDATIONS		\$32,250
E	RESILIENCE / ADAPTIVE MANAGEMENT / OPERATION		\$30,885
F	REIMBURSABLE EXPENSES		\$3,380
TOTALS			\$300,000

### NOTES

Software costs are not included. Software upgrade will be paid direct to the vendor by the City.

Water surface elevation monitoring stations may be added for a base fee of \$2,500 per month for Central Data Processing, plus \$1,600 per month per monitoring station for a minimum of 6 months.

We recommend 6 monitoring stations.

# Church Creek Drainage Basin Evaluation & Flood Reduction Study

Weston & Sampson

**City of Charleston, SC  
May 2017**

672 Marina Dr. Suite 204  
Charleston, SC 29492  
Phone: 843-881-9804

ID	Task Name	Duration	Start	Finish
1	Project Award/Council Approval	1 day	Mon 5/22/17	Mon 5/22/17
2	Project Kick Off Meeting	1 day	Thu 6/1/17	Thu 6/1/17
3	Preliminary Planning	4 days	Fri 6/2/17	Wed 6/7/17
4	Public Communication/Community Outreach	30 days	Thu 6/8/17	Wed 7/19/17
5	Data Collection	15 days	Mon 6/12/17	Fri 6/30/17
6	Model Upgrade & Calibration	15 days	Tue 7/4/17	Mon 7/24/17
7	Existing Conditions & Past Study Recommendations Assessments	15 days	Tue 7/25/17	Mon 8/14/17
8	Alternatives Development & Evaluation	10 days	Tue 8/15/17	Mon 8/28/17
9	Alternatives Development Workshop	0 days	Mon 8/28/17	Mon 8/28/17
10	Preliminary Study Results	10 days	Tue 8/29/17	Mon 9/11/17
11	Preliminary Study Results Workshop	0 days	Mon 9/11/17	Mon 9/11/17
12	Resilience & Adaptive Management & Operations Recommendations	9 days	Mon 9/11/17	Thu 9/21/17
13	Final Study & Recommendations	10 days	Fri 9/22/17	Thu 10/5/17
14	Final Study Workshop	0 days	Thu 10/5/17	Thu 10/5/17
15	Public Outreach w/Recommendations	15 days	Fri 10/6/17	Thu 10/26/17
16	Final Presentation	0 days	Mon 10/30/17	Mon 10/30/17